

What is claimed is:

Sub A1
1. A method of dynamically creating a communication path between first and second storage devices, comprising:

5 creating a connection to a source volume on the first storage device and indicating that the source volume is not ready to transmit data on the communication path;

10 after successfully creating the connection to the source volume, creating a connection to a destination volume on the second storage device and initially indicating that portions of one of: the destination volume and the source volume do not contain valid copies of data, wherein the destination volume accepts data from the source volume; and

after successfully creating the connections to the source and destination volumes, indicating that the source volume is ready to transmit data on the communication path.

2. A method, according to claim 1, further comprising:

creating at least one of: the source volume and the destination volume.

15 3. A method, according to claim 1, wherein creating the connection to the source volume includes modifying a table containing configuration information for the first storage device.

20 4. A method, according to claim 3, wherein creating the connection to the destination volume includes modifying a table containing configuration information for the second storage device.



5. A method, according to claim 1, further comprising:

following unsuccessfully creating a connection to the destination volume,
destroying the connection to the source volume.

6. A method, according to claim 5, further comprising:

5 returning an error indication.

7. A method, according to claim 1, wherein portions of the destination volume are
initially indicated as not containing valid data.

8. A method, according to claim 7, further comprising:

10 after indicating that the source volume is ready to transmit data on the
communication path, initiating a background copy operation to copy data from the source
volume to the destination volume.

9. A method, according to claim 1, wherein portions of the source volume are initially
indicated as not containing valid data.

10. A method, according to claim 9, further comprising:

15 after indicating that the source volume is ready to transmit data on the
communication path, initiating a background copy operation to copy data from the
destination volume to the source volume.

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15. A method, according to claim 13, wherein creating the connection to destination volume includes modifying a table containing configuration information for the first storage device.

16. A method, according to claim 15, wherein creating the connection to the source
5 volume includes modifying a table containing configuration information for the second storage device.

17. A method, according to claim 13, further comprising:
following unsuccessfully creating a connection to the source volume, destroying
the connection to the destination volume.

10 18. A method, according to claim 17, further comprising:
returning an error indication.

19. A method, according to claim 13, wherein portions of the destination volume are initially indicated as not containing valid data.

20. A method, according to claim 19, further comprising:
15 after indicating that the source volume is ready to transmit data on the communication path, initiating a background copy operation to copy data from the source volume to the destination volume.

25. A computer program product that creates a communication path between first and second storage devices, comprising:

executable code that creates a connection to a source volume on the first storage device and indicates that the source volume is not ready to transmit data on the communication path;

executable code that creates a connection to a destination volume on the second storage device and initially indicates that portions of one of: the destination volume and the source volume do not contain valid copies of data after successfully creating the connection to the source volume, , wherein the destination volume accepts data from the source volume; and

executable code that indicates that the source volume is ready to transmit data on the communication path after successfully creating the connections to the source and destination volumes.

26. A computer program product, according to claim 25, further comprising:

executable code that creates at least one of: the source volume and the destination volume.

27. A computer program product, according to claim 25, where executable code that creates the connection to the source volume modifies a table containing configuration information for the first storage device.

28. A computer program product, according to claim 27, wherein executable code that creates the connection to the destination volume modifies a table containing configuration information for the second storage device.

29. A computer program product, according to claim 25, further comprising:

5 executable code that destroys the connection to the source volume following
unsuccessfully creating a connection to the destination volume.

30. A computer program product, according to claim 25, further comprising:

executable code that returns an error indication.

31. A computer program product, according to claim 25, further comprising:

10 executable code that causes portions of the source volume to be initially indicated
as not containing valid data.

32. A computer program product, according to claim 31, further comprising:

executable code that initiates a background copy operation to copy data from the destination volume to the source volume after indicating that the source volume is ready to transmit data on the communication path.

33. A computer program product, according to claim 32, further comprising:

executable code that copies data corresponding to a requested portion from the destination volume to the source volume prior to completing an I/O operation in response to the requested portion being indicated as containing invalid data.

